Basic Electrical Safety

Extension cords/Power Strips:

- o Extension cords should not be used in place of permanent wiring.
- o Ensure that cords are in proper working condition.
 - No cracks, cuts or splices in the outer insulation
 - The ground plug is intact
- o Discard unsafe extension cords.
- Keep extension cords out of high pedestrian traffic areas and where they could be run over by vehicles or other types of equipment.
- o Power strips should not be permanently mounted to a wall or any other structure, even if the power strip has specific mounting fittings.
- o Do not plug a power strip into another power strip. This could cause overloading, overheating and become a fire hazard.
- Do not plug high voltage equipment such as space heaters, microwaves or toaster ovens directly into a
 power strip that is not properly rated for those items. Power strips can become over-heated and become a
 fire hazard. Large voltage items shall be plugged directly into a wall outlet.
- **Circuit Overload Protection Devices:** These are devices that are designed to protect the wiring in a house or other type of buildings to prevent a potential fire. Different types of overload protection devices include:
 - o <u>Fuses</u>- Break the circuit when too much current is flowing through the circuit. A small conductor inside the fuse heats up and melts when it reaches a specific temperature.
 - <u>Circuit Breakers</u>- As current increases in the circuit, an electromagnet inside the breaker generates increased magnetic force, eventually being great enough to pull the switch on the breaker from the "on" to the "off" position.

• Ground Fault Circuit Interrupters (GFCI)

- o GFCIs are designed to protect people from an electric shock.
- o GFCIs should be installed wherever a water hazard is present.
- You will commonly find GFCI plugs on hairdryers, wet vacs. etc.
- o GFCIs can be at the breaker, the outlet, incorporated with the plug of the appliance/piece of equipment, or part of a short extension cord.

• Other common Electrical Safety Issues

- O Have equipment checked for defects if you receive a shock when touching them.
- o Never use electrical equipment in or around water.
- Junction boxes and electrical panels need to have proper covers in place to conceal all wiring.
- O Hard wiring should be concealed when possible to avoid easy contact by people, especially children and also pets.













